

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

**POWER OF ATTORNEY
and
CORRESPONDENCE ADDRESS
INDICATION FORM**

Application Number	10/566,405
International Filing Date	July 23, 2004
First Named Inventor	Ravindra Datta
Confirmation Number	
Group Art Unit	
Examiner Name	
Attorney Docket Number	1021.2009-005

Title ELECTROCHEMICAL PREFERENTIAL OXIDATION OF CARBON MONOXIDE FROM REFORMATE

I hereby appoint

☒ Practitioners associated with Customer No. 021005

☐ Practitioner(s) named below:

as my/our attorneys/agents to prosecute the application identified above, including any continuation or divisional applications thereof, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please recognize or change the correspondence address for the above-identified application to:

☒ Customer Number 021005

Hamilton, Brook, Smith & Reynolds, P.C.

530 Virginia Road

P.O. Box 9133

Concord, Massachusetts 01742-9133

☐ Other

Please direct all telephone calls and facsimiles to:

Name N. Scott Pierce

Tel. No.

978-341-0036

Fax No.

978-341-0136

I am the:

☐ Applicant/Inventor.

☒ Authorized representative of the Assignee, Worcester Polytechnic Institute, of the entire interest. See 37 C.F.R. § 3.71. A Statement under 37 C.F.R. § 3.73(b) is enclosed.

☐ Authorized representative of the Assignee, [], together with [], of the entire interest. A Statement under 37 C.F.R. § 3.73(b) is enclosed.

SIGNATURE of Applicant or Assignee of Record

Signature

Name & Title

Date

Michael B. Manning
Michael B. Manning, Director of Technology Transfer
3/22/07

Docket No. 1021.2009-005STATEMENT UNDER 37 CFR § 3.73(b)Applicant/Patentee: Ravindra Datta and Jingxin ZhangApplication No./Patent No.: 10/566,405International Filing Date: July 23, 2004Entitled: ELECTROCHEMICAL PREFERENTIAL OXIDATION OF CARBON MONOXIDE FROM REFORMATEWorcester Polytechnic Institute

(Name of Assignee)

a university

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is

- A. ☒ the assignee of the entire right, title and interest in the patent application/patent identified above; or
- B. ☐ an assignee together with ☐ of the entire right, title and interest in the patent application/patent identified above.

The right, title and interest of the above-named assignee in the patent application/patent identified above is established by virtue of:

- A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the Patent and Trademark Office at Reel _____, Frame _____, or a copy thereof is attached.

OR

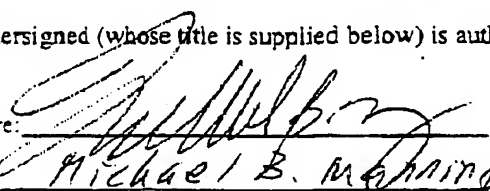
- B. ☐ A chain of title from the inventor(s) of the patent application/patent identified above, to the current assignee as shown below:

1. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or a copy thereof is attached.
2. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or a copy thereof is attached.
3. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

As required by 37 CFR 3.73(b)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

Signature: Name: Michael B. ManningTitle: Director of Technology TransferDate: 3/22/07

**COPY
NOT FOR
RECORDATION**

Docket No. 1021.2009-005

JointASSIGNMENT

WHEREAS, we, Ravindra Datta and Jingxin Zhang, have invented a certain improvement in **Electrochemical Preferential Oxidation of Carbon Monoxide From Reformate** described in an application for Patent,

- ☐ the specification of which is about to be filed in the United States Patent Office (*use for utility (37 CFR § 1.53(b)) and design filings only*);
- ☐ is about to be filed in the United States Patent Office as a Provisional Application;
- ☐ the specification of which is United States Application No. [], filed [];
- ☒ the specification of which is a Patent Cooperation Treaty Application, International Application No. PCT/US2004/023889, filed July 23, 2004, which designates the United States of America and assigned United States Application No. 10/566,405;
- ☐ which was patented under United States Patent No. [].

WHEREAS, Worcester Polytechnic Institute (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the Commonwealth of Massachusetts, and having a usual place of business at 100 Institute Road, Worcester, Massachusetts 01609 desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with the entire right, title and interest in and to said application and such Letters Patent as may issue on said invention; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein; I hereby expressly authorize the filing of an International Patent Application under the Patent Cooperation Treaty which corresponds to and claims the priority of the above-identified application;

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Docket No. 1021.2009-005

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of any future applications including substitution, reissue, divisional or continuation applications, and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request each Patent Office and the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said invention to said ASSIGNEE, its successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals the date set forth below.

Inventor's Signature: _____

Ravindra Datta

State/Commonwealth _____

of _____

County of _____

On this _____ day of _____, 20____, before me, the undersigned notary public, personally appeared Ravindra Datta,

☐ personally known to me, or

☐ proved to me through satisfactory evidence of identification, which was _____

to be the person whose name was signed on the foregoing instrument in my presence, and acknowledged that he/she signed the foregoing instrument as his/her free act and deed.

(SEAL)

Notary Public

(print name)

My Commission expires ____/____/____

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Docket No. 1021.2009-005

Inventor's Signature: Jingxin Zhang (张景新)

Jingxin Zhang

State/Commonwealth

of New YorkCounty of Monroe

On this 22 day of March, 20 07, before me, the undersigned
notary public, personally appeared Jingxin Zhang,

☒ personally known to me, or☐ proved to me through satisfactory evidence of identification, which was

to be the person whose name was signed on the foregoing instrument in my presence, and
acknowledged that he/she signed the foregoing instrument as his/her free act and deed.

(SEAL)

James L. Saller Notary Public
James L. Saller (print name)

My Commission expires 8/21/09

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Basket No. 1021.2009-005

ASSIGNMENTJoint

WHEREAS, we, **Ravindra Datta and Jingxin Zhang**, have invented a certain improvement in **Electrochemical Preferential Oxidation of Carbon Monoxide From Reformate** described in an application for Patent,

- ☐ the specification of which is about to be filed in the United States Patent Office (*use for utility (37 CFR § 1.53(b)) and design filings only*);
- ☐ is about to be filed in the United States Patent Office as a Provisional Application;
- ☐ the specification of which is United States Application No. [], filed [];
- ☒ the specification of which is a Patent Cooperation Treaty Application, International Application No. **PCT/US2004/023889**, filed **July 23, 2004**, which designates the United States of America and assigned United States Application No. **10/566,405**;
- ☐ which was patented under United States Patent No. [].

WHEREAS, **Worcester Polytechnic Institute** (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the **Commonwealth of Massachusetts**, and having a usual place of business at **100 Institute Road, Worcester, Massachusetts 01609** desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with the entire right, title and interest in and to said application and such Letters Patent as may issue on said invention; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein; I hereby expressly authorize the filing of an International Patent Application under the Patent Cooperation Treaty which corresponds to and claims the priority of the above-identified application;

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Docket No. 1021.2009-005

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of any future applications including substitution, reissue, divisional or continuation applications, and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request each Patent Office and the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said invention to said ASSIGNEE, its successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals the date set forth below.

Inventor's Signature: _____

Ravindra Datta

Ravindra Datta

State/Commonwealth

of _____

Worcester, Massachusetts

County of _____

Worcester

On this 21st day of March, 2007, before me, the undersigned notary public, personally appeared **Ravindra Datta**,



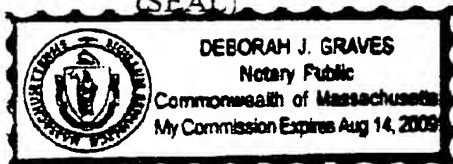
personally known to me, or



proved to me through satisfactory evidence of identification, which was

to be the person whose name was signed on the foregoing instrument in my presence, and acknowledged that he/she signed the foregoing instrument as his/her free act and deed.

(SEAL)

Deborah J. Graves

Notary Public

Deborah J. Graves

(print name)

My Commission expires 8/14/09

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Docket No. 1021.2009-005

Inventor's Signature: _____

Jingxin Zhang

State/Commonwealth _____

of _____

County of _____

On this _____ day of _____, 20____, before me, the undersigned
notary public, personally appeared **Jingxin Zhang**,

☐

personally known to me, or

☐proved to me through satisfactory evidence of identification, which was

to be the person whose name was signed on the foregoing instrument in my presence, and
acknowledged that he/she signed the foregoing instrument as his/her free act and deed.

(SEAL)

Notary Public

(print name)

My Commission expires ____/____/____

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